

CLAIM AMENDMENTS:

1. (Currently Amended) An automated method of configuring routing attributes of ports within a SAS network domain, comprising:
 - automatically discovering devices of the SAS network domain;
 - automatically discovering the ports of the discovered devices;
 - 5 automatically determining the routing attribute to be associated with each discovered port of the discovered devices;
 - automatically configuring the routing attributes of the discovered ports; and
 - automatically configuring routing table information used by the devices of the domain derived from the configured routing attributes.

2. (Previously Presented) The method of claim 1 wherein the steps of discovering devices, discovering ports, and configuring the routing attributes of the discovered ports each include a step of exchanging SMP messages.

3. (Previously Presented) The method of claim 2 wherein the step of configuring routing table information further comprises:
 - configuring routing table information within initiator and expander devices of said devices of the SAS network domain wherein said routing table information is sufficient
 - 5 to identify paths in the SAS network domain to enable the exchange of said SMP messages.

4. (Previously Presented) The method of claim 2 wherein the step of configuring routing table information further comprises:
 - completely configuring routing table information to identify all paths for exchange of messages within the SAS network domain.

5. (Currently Amended) The method of claim 4 wherein the step of completely configuring is ~~substantially~~ integrated with the steps of discovering devices, discovering ports, and configuring ports.

6. (Previously Presented) The method of claim 1 wherein the step of discovering said devices further comprises:

transmitting an SMP Discover request from a first device to a neighboring device of the first device; and

5 receiving an SMP Discover response in said first device from said neighboring device identifying other devices coupled to ports of said neighboring device.

7. (Previously Presented) The method of claim 1 wherein the step of discovering said ports of said discovered devices further comprises:

transmitting an SMP Report General request from a first device to a neighboring device of the first device; and

5 receiving an SMP Report General response in said first device from said neighboring device identifying the number of said ports within said neighboring device.

8. (Previously Presented) The method of claim 1 wherein the step of configuring further comprises:

transmitting an SMP request from a first device to a second device wherein the SMP request includes vendor unique information identifying a routing attribute of said
5 routing attributes to be configured for a port of said ports of said second device.

9. (Previously Presented) The method of claim 1 further comprising:

recursively repeating the steps of the method to traverse devices of the SAS network domain to configure said routing attributes of said ports of said devices of the SAS network domain.

10. (Currently Amended) A SAS network domain, comprising:
a plurality of expander devices providing a plurality of ports within the domain
wherein each port may have an associated routing attribute; and
a domain control element coupled to at least one of the plurality of expander
5 devices operable to configure the routing attributes of the plurality of ports, wherein the
domain control element is operable to automatically determine and automatically
configure the routing attributes of the ports by traversing port connections between the
expander devices and wherein the domain control element is further operable to use the
configured routing attributes to automatically generate complete routing tables used by
10 the plurality of expander devices.

11. (Previously Presented) The SAS network domain of claim 10 wherein the
domain control element comprises:
a SAS initiator device coupled to at least one of the plurality of expander devices.

12. (Previously Presented) The SAS network domain of claim 10 wherein the
domain control element comprises:
a SAS expander device coupled to at least one of the plurality of expander
devices.

13. (Cancelled)

14. (Currently Amended) A SAS network domain comprising:
means for discovering the topology of the SAS network domain by traversing port connections between devices of the domain;

5 means for automatically determining the routing attribute to be associated with each discovered port of the discovered devices;

means for configuring SAS routing attributes associated with ports of devices of the domain in response to discovery of the topology of the domain; and

means for configuring routing tables using the configured routing attributes, the routing tables used by the devices of the domain.

15. (Cancelled)

16. (Currently Amended) The SAS network domain of claim 14 wherein said means for configuring routing tables, said means for discovering and said means for configuring SAS routing attributes are ~~substantially~~ integrated so as to traverse the port connection between the devices of the domain only once.

17. (Previously Presented) The SAS network domain of claim 14 wherein the means for discovering the topology further comprises:

5 means for exchanging SMP messages between the devices of the domain to identify the devices, to identify the ports of the devices and to identify the port connections between the ports of the devices.

18. (Previously Presented) The SAS network domain of claim 17 wherein the means for exchanging SMP messages further comprises:

5 means for exchanging SMP Report General request and response messages to identify ports of devices and to identify the port connections between the ports of the devices.

19. (Previously Presented) The SAS network domain of claim 17 wherein the means for exchanging SMP messages further comprises:

means for exchanging SMP Discover request and response messages between the devices of the domain.

20. (Previously Presented) The SAS network domain of claim 14 wherein the means for configuring further comprises:

means for transmitting an SMP message having vendor unique information from a first device to a second device to instruct the second device to configure the routing

5 attribute of a port of the second device.